

GUIDELINES FOR USE AND INSTALLATION OF ABOVE GROUND WATER TANKS

SAFETY CONSIDERATIONS/CHECKLIST

- All tanks must be properly vented. These tanks are not pressure vessels and must be vented to atmosphere. Venting equipment should be sized to limit pressure or vacuum in the tank to a maximum of ½" of water.
- Water tanks have been engineered for the containment or transportation of water ONLY.
- Continuous operating temperatures above 100° F (38° C) are NOT RECOMMENDED and will **void all warranties**.
- Protect tanks from impact (especially sharp blows) HANDLE WITH EXTREME CARE.
- DO NOT STAND OR WORK ON TOP OF A TANK. Remember, Safety First!

LOCATION REQUIREMENTS

- A thorough evaluation of the proposed tank location prior to tank installation is recommended. There are several items to consider prior to placing the tank into service including:
 1. DO NOT locate the tank in a flood plain or next to equipment that generates heat.
 2. Locate the tank so it is easy to install access and maintain.
 3. It is the responsibility of the end user to ensure that all location requirements are taken into consideration including all federal, state and local regulations that apply to tank installation.
- Vertical tanks can be placed on firm, compacted soil that is free of rocks/sharp objects and capable of bearing the weight of the tank and its maximum contents. In addition, a sand or pea gravel base with provisions for preventing erosion is highly recommended. Installation sites for tanks 8,000 gallons or more must be on a reinforced concrete pad providing adequate support and enough space to attach a tank restraint system (anchor using the molded-in tie down lugs with moderate tension, being careful not to over-tighten), especially where seismic or large wind forces are present. The pad should be clean, smooth and level, so it fully supports the entire tank bottom with no deflection.
- Horizontal tanks must be secured with bands and/or hoops to prevent tank movement. CHECK BAND/HOOP TENSION AFTER FILLING TANK. Bands and/or hoops must be tightened to remove all gaps between bands/hoops and tank before and after filling, but not to the degree that there is any tank distortion. Tanks used for transport must have full bottom support and be properly secured to the transport vehicle. DO NOT EXCEED VEHICLE'S GROSS WEIGHT.

TANK ENTRY PRECAUTIONS

- If entry into the tank is necessary, be sure to take all necessary precautions and follow all applicable local, state and federal rules and regulations. Entry into the tank should be considered a "CONFINED SPACE ENTRY" with appropriate OSHA safety precautions required. DO NOT enter tank without taking the proper precautions.

TANK FITTINGS AND CONNECTIONS

- Tank fittings are typically left installed in the tank.
- All tank connections must have adequate provisions for tank expansion/contraction due to temperature and load changes and should allow for a 4% dimensional movement. SII strongly recommends the use of expansion joints or other provisions for all tank connections. **The use of rigid piping or the failure to provide for the expansion of the tank will void all warranties.**
- After all connections to the tank have been made, fill the tank with water and hold for at least 5 hours to identify any leak(s). Fittings are factory installed—if the fitting leaks first check the tightness of each connection. If the leak persists, inspect the gasket to insure it is fully contacting the tank wall as well as check for damage and proper gasket compression. Correct gasket compression should be between 25 and 50%. **Recheck fitting tightness periodically.**